9. The method as in claim **4**, wherein the completing step includes a second depositing step of depositing passivation layers and anti-reflective coatings on front sides of the partially completed PV cells.

10. The method as in claim **9**, wherein the completing step further comprises the step of bonding a transparent second substrate to the front sides of the PV cells using a second adhesion layer.

11. The method as in claim **10**, wherein the second adhesion layer comprises ethyl vinyl acetate.

12. The method as in claim **9**, wherein the string includes conductive lines connecting at least some of the contacts on different ones of the partially completed PV cells.

13. The method as in claim **1**, wherein multiple strings are bonded side by side in parallel on the first substrate.

14. A solar panel manufacturing method, comprising a process for forming a multiplicity of PV cells, the process comprising the steps of:

forming separation layers on a multiplicity of donor wafers;

depositing first silicon layers of a first conductivity type on the separation layers on said donor wafers;

depositing second silicon layers of an opposite second conductivity type on the first silicon layers;

texturing the front surfaces of the second silicon layers;

forming passivating and anti-reflective layers on the textured front surfaces of the second silicon layers;

forming frontside contacts through the passivating and anti-reflective layers to the second silicon layers; and

a combining step including tabbing the frontside contacts and bonding the multiplicity of donor wafers to a transparent frontside mounting substrate using a first adhesion layer with the silicon layers disposed between the donor wafers and the mounting substrate.

15. The method as in claim **14**, wherein the first adhesion layer comprises ethyl vinyl acetate.

16. The method as in claim **14**, further comprising separating the donor wafers from the first and second silicon layers across the separation layer.

17. The method as in claim **14**, wherein the separation layers comprise porous anodically etched silicon layers.

18. The method as in claim **14**, further comprising the subsequent steps of:

depositing second passivation layers on the second silicon layers, each of the second passivation layers comprising a multiplicity of contact holes therethrough; and

depositing conductive layers on the passivation layers, the conductive layers making electrical contact with upper surfaces of the second silicon layers within the contact holes.

19. The method as in claim **14**, wherein the steps of depositing the second passivation layers and the conductive layers are performed while maintaining a temperature of the mother wafers at less than 225 C.

20. The method as in claim **14**, further comprising the subsequent steps of:

depositing conducting adhesive layers on said conductive layers; and

a second combining step including stringing together the multiplicity of PV cells by attachment of the frontside tabs to the conducting adhesive layers and bonding a backside substrate to the PV cells using a second adhesion layer.

21. The method as in claim **20**, wherein the backside substrate comprises poly vinyl fluoride.

22. The method as in claim **14**, further comprising the steps of:

depositing second passivation layers on the second silicon layers;

depositing conductive layers on the second passivation layers; and

focusing a laser beam on selected locations of the upper surfaces of the conductive layers, thereby inducing melting and penetration of the conductive layers through the passivation layers to form electrical contact from the conductive layers to the second silicon layers.

23. A solar panel manufacturing method, comprising a process for forming a multiplicity of PV cells, said process comprising the steps of:

forming separation layers on a multiplicity of donor wafers;

depositing first silicon layers of a first conductivity type on the separation layers on the donor wafers,

depositing second silicon layers of an opposite conductivity type on the second silicon layers to form the multiplicity of PV cells connected to respective ones of the donor wafers;

forming first contacts to the first silicon layers through the second siliocon layers;

forming second contacts to the second silicon layers;

stringing together a plurality of the PV cells with interconnections between first contacts of one PV cell and second contacts of an adjacent PV cell; and

bonding the multiplicity of donor wafers to a backside mounting substrate using a first adhesion layer, wherein the PV cells are disposed between the donor cells and the mounting substrate.

24. The method as in claim **23**, further comprising the step of separating the donor wafers from the first and second silicon layers across the separation layers.

25. The method as in claim **24**, further comprising the subsequent steps of:

texturing exposed surfaces of the first silicon layer;

depositing passivating and anti-reflective layers on the textured exposed surfaces.

26. The method as in claim **25**, further comprising the steps of:

depositing an adhesion layer over the passivating and anti-reflective layers; and

then laminating a transparent frontside substrate to the passivating and anti-reflective layers, wherein the adhesion layer is transparent after the laminating step.

27. The method as in claim **23**, wherein said separation layers are porous anodically etched silicon layers formed in the donor wafers.

28. The method as in claim **23**, wherein the first substrate comprises poly vinyl fluoride.

29. A solar panel circuit comprising:

a multiplicity of strings, each string comprising a plurality of photovoltaic (PV) cells wired in parallel, each string having an input connection and an output connection;

wherein all of said input connections are wired together and wherein all of said output connections are wired together.

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